

MODEL

AR-NB3

NETWORK EXPANSION KIT

OPERATION MANUAL
(for network printer)

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INTRODUCTION

The optional network expansion kit (AR-NB3) enables the machine to be used as a network printer.

To use the machine as a PS printer, the PS3 expansion kit (AR-PK1/N) must be purchased and the product key (password) must be entered in "Product Key Setting" in the Web page (for the administrator). Please consult your dealer for the product key to be entered.

Note

- This manual only explains the network printer function that can be used when the optional network expansion kit is installed. For information on copier functions, adding paper and toner, removing misfeeds, using peripheral equipment, and other general information, please refer to "Operation manual (for general information and copier)" that accompanies the machine. For information on the network scanner function, please refer to the "Operation manual (for network scanner)" in the network expansion kit (AR-NB3).
- For information on installing the drivers and software cited in this manual, please refer to the separate "Software setup guide".
- For information on the operating system, please refer to your operating system manual or the online Help function.
- The explanations of screens and procedures in this manual are primarily for Windows® XP in Windows® environments, and Mac OS X v10.2.8 in Macintosh environments. The screens may vary in other versions of the operating systems.
- The explanations in this manual are based on American English and the North American version of the software. Software for other countries and regions may vary slightly from the North American version.
- This manual refers to the digital multifunction device equipped with the network function as "the machine".
- This manual refers to the Reversing single pass feeder as the "RSPF" and the Single pass feeder as the "SPF". Unless specific mention is made, both the RSPF and the SPF are referred to simply as "SPF".
- Wherever "AR-XXXX" appears in this manual, please substitute your model name for "XXXX".

- In some regions the "Key operator's guide" cited in this manual is a separate manual, and in other regions the "Key operator's guide" is included in the "Operation manual (for general information and copier)".
- The "Dual function board" cited in this manual can be installed as an option in some models and is pre-installed standard in other models. For detailed information, please refer to "3. PERIPHERAL DEVICES AND SUPPLIES" in the "Operation manual (for general information and copier)".

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The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

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This chapter explains the basic procedure for printing in Windows and how to select printer driver settings.

BASIC PRINTING

The following example explains how to print a document from WordPad.

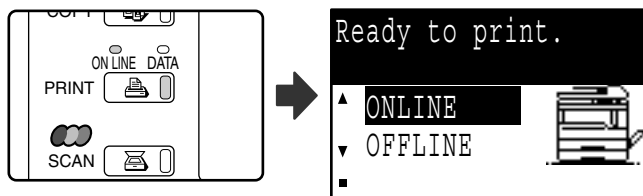
Before printing, make sure that the correct size of paper for your document has been loaded in the machine.



Paper that can be used and the procedures for loading paper are the same as for copying. See the "Operation manual (for general information and copier)".

1 Make sure that the ONLINE indicator on the operation panel is lit.

If the ONLINE indicator is not on, press the [PRINT] key to switch to printer mode and then use the [▲] key to select "ONLINE".



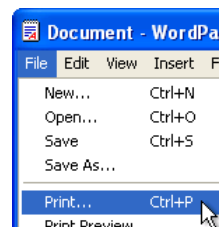
The status of the printer function is indicated by the ONLINE and DATA indicators above the [PRINT] key.

	ONLINE indicator	DATA indicator
Lit	The machine is online. Printing is possible.	There is print data in memory that has not been printed yet.
Blinking	A print job is being canceled.	Printing is in progress or data is being received.
Off	The machine is offline. Printing is not possible.	There is no print data in memory and print data is not being received.

2 Start WordPad and open the document that you wish to print.

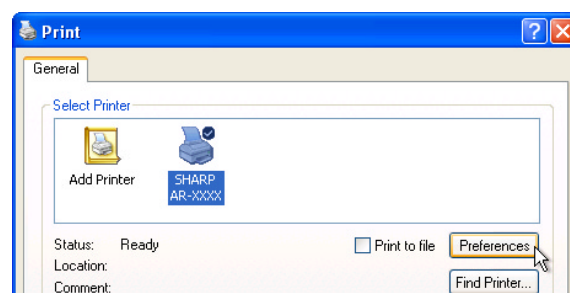
3 Select [Print] from the application's [File] menu.

The "Print" dialog box will appear.



4 Make sure that "SHARP AR-XXXX" is selected as the printer. If you need to change any print settings, click the [Preferences] button ([Properties] button in Windows 95/98/Me/NT 4.0).

The printer driver setup screen will appear.



Windows 2000 does not have the [Preferences] button in this dialog box. Select settings as needed on each of the tabs in the setup screen.

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[ROTATING THE PRINT IMAGE 180 DEGREES \(page 12\)](#),
[PRINTING A WATERMARK \(page 12\)](#),
[PRINTING TEXT AND LINES IN BLACK \(page 13\)](#)

5 Click the [Print] button ([OK] button in Windows 95/98/Me/NT 4.0).

Printing begins.

The print job is delivered to the output tray, with the position of the paper offset slightly from the previous job (offset function).



When the job separator tray is installed

The output tray can be selected when selecting print settings at the time of printing. To change the tray selection, select the desired tray in "Output" in the [Paper] tab of the printer driver setup screen.

IF THE TRAY RUNS OUT OF PAPER DURING PRINTING

Add paper to the tray that ran out or to the bypass tray. If you add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode and select "BYPASS-TRAY". Printing will resume. Note that if the "AUTO TRAY SWITCHING" setting is selected in the "PAPER SIZE SET" (accessed by pressing the [SPECIAL FUNCTION] key) and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

PAUSING A PRINT JOB

To pause a print job, press the [PRINT] key on the machine to switch to printer mode and then select "OFFLINE" with the [▼] key. The machine pauses the print job and then goes offline.

- To cancel a print job, press the [C] key (⏏).
- To resume printing, select "ONLINE" with the [▲] key.

WHEN "PAPER SOURCE" IS SET TO [AUTO SELECT]

If "Paper Source" is set to [Auto Select] in the [Paper] tab of the printer driver setup screen and the correct size of paper for a print job is not loaded in the machine, the printing procedure will vary depending on the "FORCED OUTPUT OF PRINT" setting ([page 31](#)) in the key operator programs.

When "FORCED OUTPUT OF PRINT" is disabled

Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and select "BYPASS-TRAY". Printing will resume.

When "FORCED OUTPUT OF PRINT" is enabled

The closest size of paper in a tray other than the bypass tray will be used for printing.



If the print image is in a different orientation than the paper, the print image will be automatically rotated 90 degrees to enable correct printing on the paper. (Other than the bypass tray)

HOW [BYPASS TRAY] AND [BYPASS MANUAL] DIFFER IN THE "PAPER SOURCE" SETTINGS

There are two bypass tray settings in "Paper Source" in the [Paper] tab of the printer driver setup screen:

- When [Bypass Tray] is selected, the print job is automatically printed on the paper in the bypass tray.
- When [Bypass Manual] is selected, the print job is not printed until paper is inserted into the bypass tray. If paper is already in the bypass tray, remove the paper and then re-insert it to begin printing.

AUDITING MODE

When "AUDITING MODE" is enabled in the key operator programs, a 5-digit account number must be entered in the printer driver setup screen in order to print. Account numbers are stored in the key operator programs. (See the "Key operator's guide".)

To open the account number entry screen, click the [Job Control] button in the [Main] tab of the printer driver setup screen.



Click the checkbox on the left side of "Account Number" so that a checkmark appears, enter your 5-digit account number, and click the [OK] button.



When the [Auto Job Control review] checkbox is clicked, the account number confirmation screen always appears before printing starts.



- If "CANCEL JOBS OF INVALID ACCOUNTS" is enabled in the key operator programs and printing is attempted without entering an account number or an invalid account number is entered, printing will not take place. To allow printing without the entry of a valid account number, disable "CANCEL JOBS OF INVALID ACCOUNTS". In this case, the number of pages printed is added to the "OTHERS" count.
- When the PPD file* is used in Windows, auditing mode cannot be used in the printer function. For this reason, do not enable "CANCEL JOBS OF INVALID ACCOUNTS" in the key operator programs as this will prevent printing. Printed pages will be added to the "OTHERS" count. (See the "Key operator's guide".)

* The PPD file enables the machine to print using the standard PS driver of the operating system.

OPENING THE PRINTER DRIVER FROM THE [START] BUTTON

To change the printer driver settings, follow the steps below. Settings adjusted in this way will be the initial settings when you print from an application. (If you change the settings in the printer driver setup screen at the time of printing, the settings will revert to the initial settings when you quit the application.)

Windows 2000/XP/Server 2003

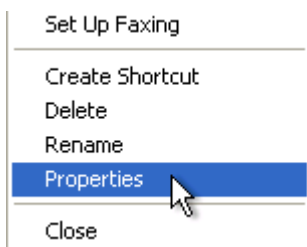
1 Click the [start] button, and then click [Control Panel].

- In Windows 2000, click the [Start] button and select [Settings].
- In Windows Server 2003, click the [Start] button and then click [Printers and Faxes]. Go to step 3.

2 Click [Printers and Other Hardware], and click [Printers and Faxes].

In Windows 2000, click [Printers].

3 Click the [SHARP AR-XXXX] printer driver icon and select [Properties] from the [File] menu.



4 Click the [Printing Preferences] button in the [General] tab.

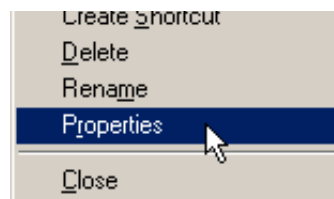
The printer driver setup screen will appear.

➡ [PRINTER DRIVER SETTINGS \(page 7\)](#)

Windows 95/98/Me/NT 4.0

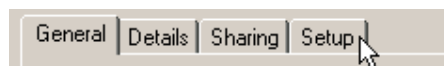
1 Click the [Start] button, select [Settings] and then click [Printers].

2 Click the [SHARP AR-XXXX] printer driver icon and select [Properties] from the [File] menu.



In Windows NT 4.0, select [Document Defaults] to open the printer driver setup screen.


3 In Windows 95/98/Me, click the [Setup] tab.




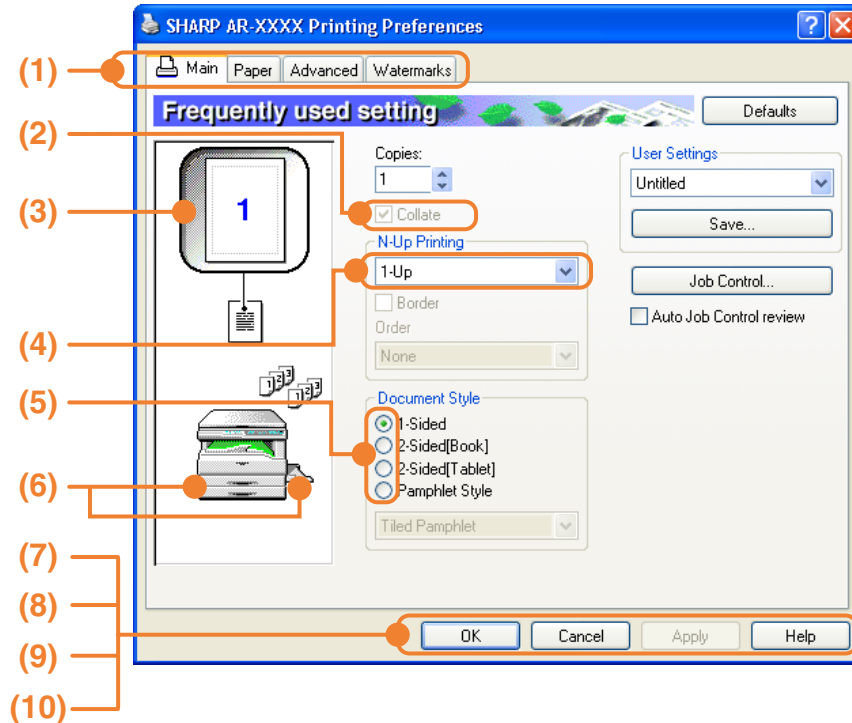
The printer driver setup screen will appear.

➡ [PRINTER DRIVER SETTINGS \(page 7\)](#)

PRINTER DRIVER SETTINGS

To view Help for a setting, click the  button in the upper right-hand corner of the window and then click the setting.

Some restrictions exist on the combinations of settings that can be selected in the printer driver setup screen. When a restriction is in effect, an information icon () will appear next to the setting. Click the icon to view an explanation of the restriction.



(1) Tab

The settings are grouped on tabs. Click on a tab to bring it to the front.

(2) Checkbox

Click on a checkbox to activate or deactivate a function.

(3) Print image

This shows the effect of the selected print settings.

(4) Drop-down list

Allows you to make a selection from a list of choices.

(5) Check button

Allows you to select one item from a list of options.

(6) Image of paper trays

The tray selected in "Paper Source" in the [Paper] tab appears in blue. You can also click on a tray to select it.

(7) [OK] button

Click this button to save your settings and exit the dialog box.

(8) [Cancel] button

Click this button to exit the dialog box without making any changes to the settings.

(9) [Apply] button

Click to save your settings without closing the dialog box.



- Windows NT 4.0 does not have the [Apply] button.
- The [Apply] button does not appear when you open this window from an application.

(10) [Help] button

Click this button to display the help file for the printer driver.



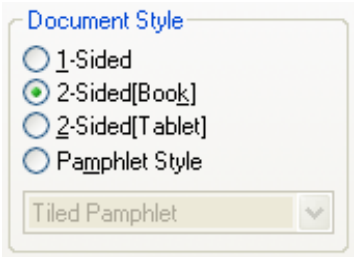
- The settings and the image of the machine will vary depending on the model. If a tray or job separator tray option is installed, see "CONFIGURING THE PRINTER DRIVER" in "3. TROUBLESHOOTING AND USEFUL INFORMATION" in the "Software setup guide" to configure the settings for the option.
- For information on the printer function, see ["PRINTER DRIVER SPECIFICATIONS" \(page 39\)](#).

TWO-SIDED PRINTING (ONLY FOR MODELS THAT SUPPORT TWO-SIDED PRINTING)

On models that have the two-sided printing function, both sides of the paper can be printed on.

To use this function, open the printer driver setup screen and select [2-Sided (Book)] or [2-Sided (Tablet)] from "Document Style" in the [Main] tab.

To open the printer driver, see ["BASIC PRINTING" \(page 3\)](#).



- Paper sizes that can be used for two-sided printing are Ledger, Letter, Legal, Foolscap, A3, A4, A5, B4 and B5.
- The bypass tray cannot be used for two-sided printing.

The following example shows the result when portrait data is printed on both sides of the paper.

Print data	Printing result	
	2-Sided (Book)	2-Sided (Tablet)
	<p>The pages are printed so that they can be bound at the side.</p>	<p>The pages are printed so that they can be bound at the top.</p>

Pamphlet style

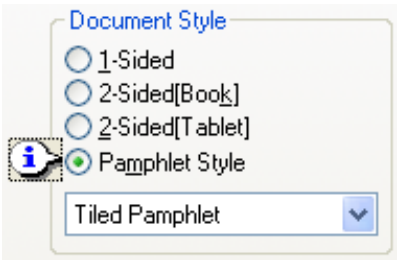
Pamphlet style prints two pages each on the front and back of each sheet of paper (four pages total on one sheet) so that the sheets can be folded down the center and bound to create a pamphlet.

This function is convenient when you wish to compile printed pages into a pamphlet.

To use this function, open the printer driver setup screen and select [Tiled Pamphlet] or [2-Up Pamphlet] in "Document Style" in the [Main] tab.

The direction of opening of the pamphlet can be selected with the "Right Turning Pamphlet" checkbox in the [Advanced] tab.

The following examples show how 8 pages are printed when [Tiled Pamphlet] is selected.



1

Print data	Printing result	
	<input type="checkbox"/> Right Turning Pamphlet	<input checked="" type="checkbox"/> Right Turning Pamphlet



- Because four pages are printed on each sheet of paper, blank pages are automatically added at the end when the total number of pages is not a multiple of four.
- When [Tiled Pamphlet] is selected, printing will take place on paper that is twice the size of the paper size specified in the application.
- When [2-Up Pamphlet] is selected, each page is reduced in the same way as for 2-Up and printed on the size of paper that is specified in the application.



PRINTING MULTIPLE PAGES ON ONE PAGE

This feature allows you to reduce and print two, four, six, eight, nine or sixteen document pages on a single sheet of paper.

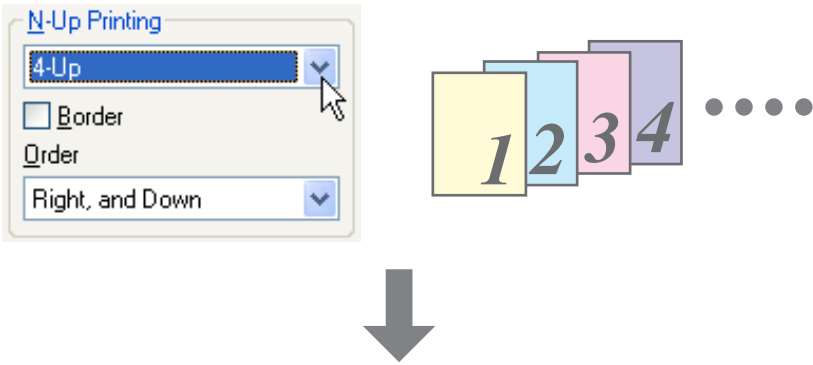
To use this function, open the printer driver setup screen and select the number of pages per sheet (2-Up, 4-Up, 6-Up, 8-Up, 9-Up, or 16-Up) in "N-Up Printing" in the [Main] tab.

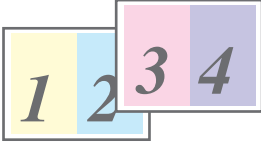
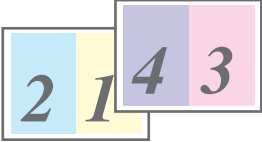
The order of the pages can be changed in the "Order" menu.





To open the printer driver, see ["BASIC PRINTING" \(page 3\)](#).

 The "N-Up Printing" setting is not available when [Fit to Page] is selected.
 [FITTING THE PRINT IMAGE TO THE PAPER \(page 11\)](#)



For example, when [2-Up] or [4-Up] is selected, the result will be as follows depending on the selected order.



N-Up	Left to Right	Right to Left
[2-Up]		

N-Up	Right, and Down	Down, and Right	Left, and Down	Down, and Left
[4-Up]				

If you select the [Border] checkbox, borderlines will be printed around each page.

 Examples for 2-Up and 4-Up are shown here. The order of 6-Up, 8-Up, 9-Up, and 16-Up is the same as 4-Up. The order can be viewed in the print image in the printer driver setup screen.
 [PRINTER DRIVER SETTINGS \(page 7\)](#)

FITTING THE PRINT IMAGE TO THE PAPER

The printer driver can adjust the size of the print image to match the size of the paper loaded in the machine. Follow the steps shown below to use this function. The explanation below assumes that you intend to print a ledger or A3 size document on letter or A4 size paper.

To open the printer driver, see ["BASIC PRINTING" \(page 3\)](#).

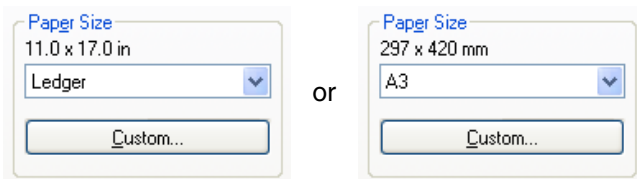


The "Fit To Paper Size" setting is not available when "N-Up Printing" is selected.

[PRINTING MULTIPLE PAGES ON ONE PAGE \(page 10\)](#)

1 Click the [Paper] tab in the printer driver setup screen.

2 Select the original size (Ledger or A3) of the print image in "Paper Size".



3 Click on the [Fit to Page] checkbox.

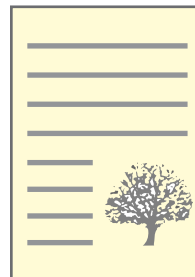
When using the PS printer driver, select [Fit To Paper Size] in "Zoom Setting".



4 Select the size of the paper (Letter or A4) that is loaded in the machine from "Fit to Paper Size".

The size of the print image will be automatically adjusted to match the paper loaded in the machine.

Paper Size: Ledger or A3
Fit To Paper Size: Letter or A4



Ledger or A3 size
document
(Paper Size)



Letter or A4 size
paper
(Fit To Paper Size)



When using the PS printer driver, the print image can be enlarged or reduced by means of numerical values. (The vertical and horizontal ratios can be set separately.) Select [XY-Zoom] in step 3, click the [Width/Length] button, and adjust the ratios in the screen that appears.

ROTATING THE PRINT IMAGE 180 DEGREES

The print image can be rotated 180 degrees.
This feature rotates the print image 180 degrees to enable correct printing on paper that can only be loaded in one orientation.
To use this function, select the image orientation in "Image Orientation" on the [Paper] tab, and then click on the [Rotate 180 degrees] checkbox.
To open the printer driver, see ["BASIC PRINTING" \(page 3\)](#).



Printing result	
<div><input checked="" type="radio"/> Landscape</div> <div><input checked="" type="checkbox"/> Rotate 180 degrees</div>	<div><input checked="" type="radio"/> Landscape</div> <div><input type="checkbox"/> Rotate 180 degrees</div>
<div>ABCD</div>	<div>ABCD</div>



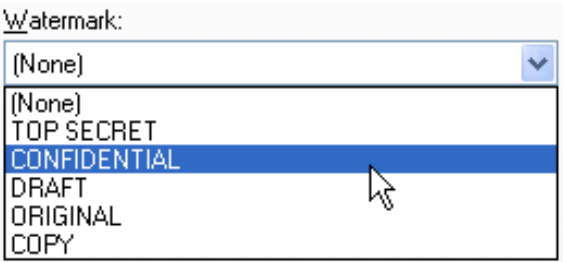
The procedure for loading paper is explained in the "Operation manual (for general information and copier)".

PRINTING A WATERMARK

You can print a watermark such as "CONFIDENTIAL" on your document. To print a watermark, open the printer driver setup screen, click the [Watermarks] tab, and follow the steps below.
To open the printer driver, see ["BASIC PRINTING" \(page 3\)](#).


How to Print a Watermark

From the "Watermark" drop-down list, select the watermark that you wish to print (for example "CONFIDENTIAL"), and start printing.



Print sample





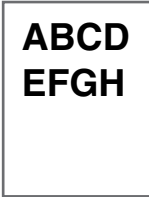
You can enter text to create your own custom watermark. For details on watermark settings, view printer driver Help.
 [PRINTER DRIVER SETTINGS \(page 7\)](#)

PRINTING TEXT AND LINES IN BLACK

Color text and lines that are normally printed in light color can be printed in black. Color text and lines that are faint when printed normally can be printed in black to improve legibility.

Printing text in black

Text that is any color other than white is printed in black.
To use this function, open the printer driver setup screen and click on the [Text To Black] checkbox in the [Advanced] tab.

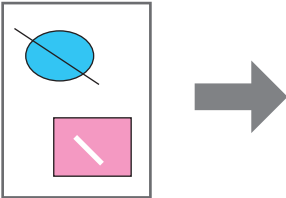
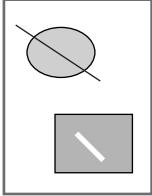
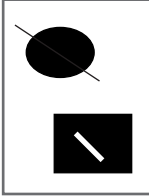
Print data	Printing result	
	<input type="checkbox"/> Text To Black	<input checked="" type="checkbox"/> Text To Black
		



- When using the PCL6 printer driver, if [Print as graphics] is selected in "TrueType Mode" of [Font] in the [Advanced] tab, this function cannot be used.
- When using the PCL5e printer driver, if [Raster] is selected in "Graphics Mode" in the [Advanced] tab, this function cannot be used.

Printing lines in black

Lines and solids that are any color other than white are printed in black.
To use this function, open the printer driver setup screen and select the [Vector To Black] checkbox in the [Advanced] tab.

Print data	Printing result	
	<input type="checkbox"/> Vector To Black	<input checked="" type="checkbox"/> Vector To Black
		



When using the PCL6 or PCL5e printer driver, if [Raster] is selected in "Graphics Mode" in the [Advanced] tab, this function cannot be used.

2

PRINTER UTILITIES (WINDOWS)

This chapter explains printer utilities that are used to manage and monitor the network printer.

PRINTER UTILITIES

The "Software CD-ROM (1)" included in the network expansion kit contains the following two printer utilities.

Printer Status Monitor (for general users)

This allows the user to check on the computer screen whether or not the machine is able to print. It provides information on error states such as paper misfeeds and shows the configuration of the machine (number of trays, etc.) by means of illustrations. Available paper sizes and paper remaining are also indicated.

Printer Administration Utility (for the administrator)

This allows the administrator to check information on supplies and error states of the machine and other SHARP printers (compatible with the Printer Administration Utility) that are connected to the network. Settings can also be changed via the utility.



- In order to use the Printer Status Monitor and Printer Administration Utility, the machine must be connected to a network.
- To install the Printer Status Monitor and Printer Administration Utility, see "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".
- To use the Printer Administration Utility in Windows 95, a system file must be updated. See "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide" and view the detailed information in the "Software Selection" window of the installer.

BEFORE USING THE PRINTER STATUS MONITOR

To use the Printer Status Monitor to monitor the status of the machine, the printing environment must be configured as explained below.

Printing via a server:

Install the software as explained in "Using the machine as a shared printer via a server" in "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".

When the first print job is executed after starting up the Printer Status Monitor, the machine's IP address is automatically set in the Printer Status Monitor.

Direct printing without a server:

Install and configure the software as explained in "INSTALLING THE PRINTER DRIVER (STANDARD INSTALLATION)" in "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".

(This is not necessary if the software has already been installed and configured.)

USING THE PRINTER UTILITIES

STARTING UP THE PRINTER UTILITIES

If the Printer Status Monitor or Printer Administration Utility is not running, use the following procedure to start the utility.



When the Printer Administration Utility is first started up, the TCP/IP settings window appears. To monitor the machine on a local network, select the [Local Subnet Search] checkbox. Otherwise, enter the machine's IP address. For more information, see the Help file.

Printer Status Monitor

Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Status Monitor]. Select [Printer Status Monitor].

Printer Administration Utility

Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Administration Utility]. Select [Printer Administration Utility].

2

USING THE PRINTER UTILITIES

For information on using the Printer Status Monitor and Printer Administration Utility, see the Help files for each. The Help files can be viewed as follows:

Printer Status Monitor


Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Status Monitor]. Select [Help].

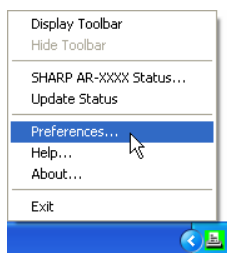
Printer Administration Utility

Click the [start] button, point to [All Programs] ([Programs] in operating systems other than Windows XP/Server 2003) and then [SHARP Printer Administration Utility]. Select [Help].

CHANGING THE PRINTER STATUS MONITOR SETTINGS

Once installed, the Printer Status Monitor normally runs in the background in Windows. If you need to change the Printer Status Monitor settings, follow the steps below.

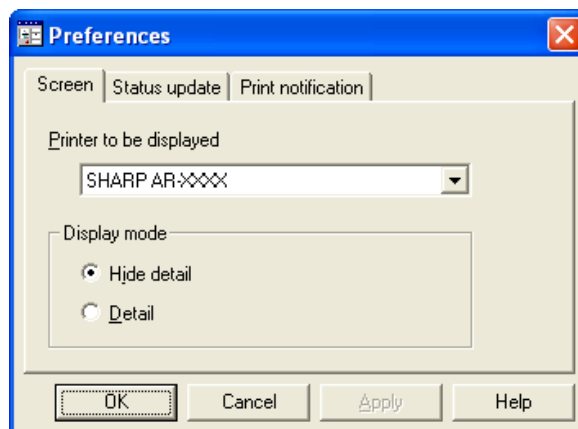
- 1 Right-click the [Printer Status Monitor] icon () on the task bar, and select [Preferences] from the pop-up menu.



If the [Printer Status Monitor] icon does not appear on the task bar, see ["STARTING UP THE PRINTER UTILITIES"](#) to start the Printer Status Monitor.


- 2 Change the Printer Status Monitor settings as desired.

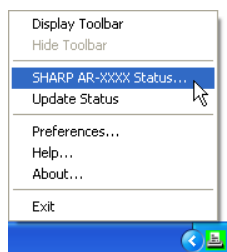
For information on the Printer Status Monitor settings, see Printer Status Monitor Help. (Click the [Help] button in the preferences window.)



CHECKING THE PRINTER STATUS

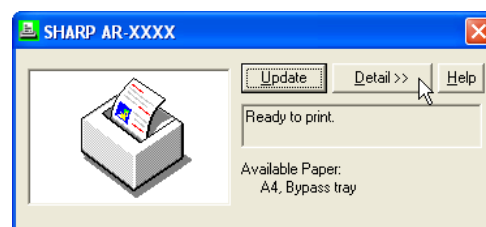
The Printer Status Monitor allows you to check whether or not toner and paper remain in the machine.

- 1 Right-click the [Printer Status Monitor] icon () on the task bar, and select [SHARP AR-XXXX Status] from the pop-up menu.

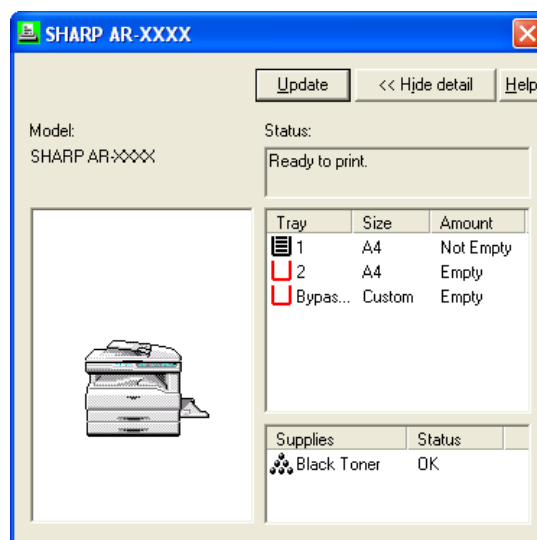


Note The icon turns red when printing is not possible due to a machine error or other problem.

- 2 Check the current status of the printer in the screen that appears. If you wish to know more detailed status information, click the [Detail] button.



The screen will change to the detailed status screen.



To return to the abbreviated status screen, click the [Hide detail] button.



By default, the abbreviated status screen appears when [SHARP AR-XXXX Status] is selected in Step 1. If desired, you can change the setting to have the detailed status screen initially appear.

[CHANGING THE PRINTER STATUS MONITOR SETTINGS \(page 15\)](#)

3

PRINTING FROM A MACINTOSH

This chapter explains the procedures for printing from a Macintosh environment.

BASIC PRINTING

To use the machine as a printer for the Macintosh, the PS3 expansion kit (AR-PK1/N) must be installed and the machine must be connected to a network. To install the PPD file and configure the printer driver settings, see "2. INSTALLING THE SOFTWARE (FOR OPTIONS)" in the "Software setup guide".

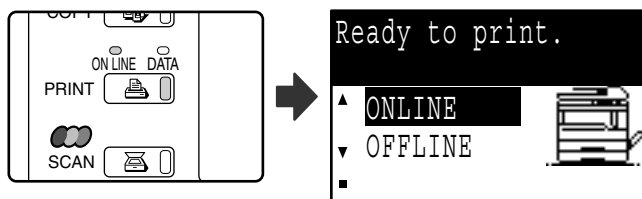
Before printing, make sure that the correct size of paper for your document has been loaded in the machine.



Paper that can be used and the procedures for loading paper are the same as for copying. See the "Operation manual (for general information and copier)".

1 Make sure that the ONLINE indicator on the operation panel is lit.

If the ONLINE indicator is not on, press the [PRINT] key to switch to printer mode and then use the [▲] key to select "ONLINE".



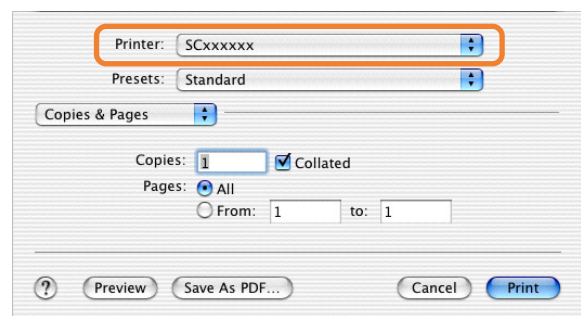
The status of the printer function is indicated by the ONLINE and DATA indicators above the [PRINT] key.

	ONLINE indicator	DATA indicator
Lit	The machine is online. Printing is possible.	There is print data in memory that has not been printed yet.
Blinking	A print job is being canceled.	Printing is in progress or data is being received.
Off	The machine is offline. Printing is not possible.	There is no print data in memory and print data is not being received.

2 Start the application and open the document that you wish to print.

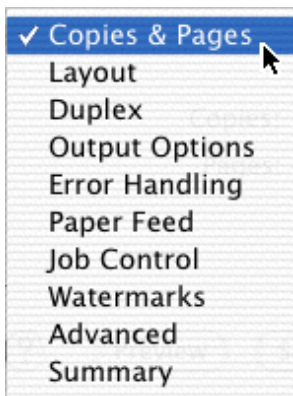
3 Select [Print] from the application's [File] menu.


4 Make sure that the correct printer is selected.



- The machine name that appears in the "Printer" menu is the name that was entered when AppleTalk settings were configured from the "Network Utilities" CD-ROM. Unless the name was changed when configuring the settings, it will be [SCxxxxxx] (where "xxxxxx" is a sequence of characters that varies depending on your machine).
- The Print window varies depending on the operating system version, the printer driver version, and the application.

5 Select print settings.



Click  next to [Copies & Pages] ([General] in Mac OS 8.6 to 9.2.2) and select the settings that you wish to configure from the pull-down menu. The corresponding setting screen will appear.



When the job separator tray is installed

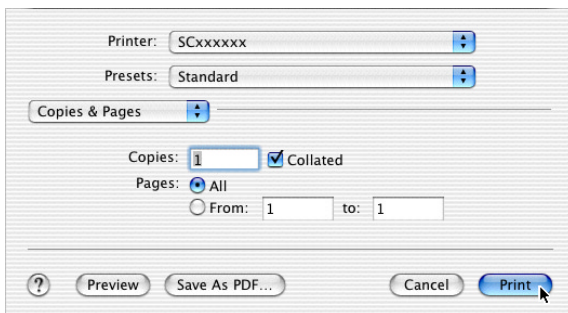
The output tray can be selected when selecting print settings at the time of printing. Select the output tray in "Output" in the [Advanced] menu of the Print window.

- If you are using Mac OS 8.6 to 9.2.2, select the output tray in "Output" in the [Output and Document Style] menu of the Print window.
- If you are using Mac OS X v10.1.5, select the output tray in the [Output] tab in the [Printer Features] menu of the Print Window.



The settings vary depending on the operating system version, the printer driver version, and the application.

6 Click the [Print] button .




Printing begins.

IF THE TRAY RUNS OUT OF PAPER DURING PRINTING

Add paper to the tray that ran out or to the bypass tray. If you add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode and select "BYPASS-TRAY". Printing will resume. Note that if the "AUTO TRAY SWITCHING" setting is selected in the "PAPER SIZE SET" (accessed by pressing the [SPECIAL FUNCTION] key) and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

PAUSING A PRINT JOB

To pause a print job, press the [PRINT] key on the machine to switch to printer mode and then select "OFFLINE" with the [▼] key. The machine pauses the print job and then goes offline.

- To cancel a print job, press the [C] key (.
- To resume printing, select "ONLINE" with the [▲] key.

WHEN [PAPER FEED] IS SET TO [AUTO SELECT]

If [Paper Feed] is set to [Auto Select] in the Print window and the correct size of paper is not loaded in the machine, the printing procedure will vary depending on the ["FORCED OUTPUT OF PRINT" \(page 31\)](#) setting in the key operator programs.

When "FORCED OUTPUT OF PRINT" is disabled

Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and select "BYPASS-TRAY". Printing will resume.

When "FORCED OUTPUT OF PRINT" is enabled

The closest size of paper in a tray other than the bypass tray will be used for printing.



The print image is automatically rotated 90 degrees in the event that the paper is loaded in an orientation different from the print image (except when the bypass tray is used).

HOW [BYPASS TRAY] AND [BYPASS MANUAL] DIFFER IN THE [PAPER FEED] SETTINGS

There are two bypass tray settings in [Paper Feed] of the Print window:

- When [Bypass Tray] is selected, the print job is automatically printed on the paper in the bypass tray.
- When [Bypass Manual] is selected, the print job is not printed until paper is inserted into the bypass tray. If paper is already in the bypass tray, remove the paper and then re-insert it to begin printing.

3

JOB CONTROL FUNCTION (MAC OS 8.6 TO 9.2.2, MAC OS X V10.2 TO 10.3.4)

When "AUDITING MODE" is enabled in the key operator programs, enter your 5-digit account number in "Account Number" in [Job Control] in the Print window.



In Mac OS 8.6 to 9.2.2, select [On] in "Account Number" in [Job Control] in the Print window, and enter your 5-digit account number in the box at right. Account numbers are programmed in the key operator programs. (See the "Key operator's guide".)



- When auditing mode is enabled, a print job may not be printed if an account number is not entered or an incorrect account number is entered. This depends on the key operator program settings.
- In Mac OS X v10.1.5, auditing mode cannot be used. For this reason, do not enable "CANCEL JOBS OF INVALID ACCOUNTS" in the key operator programs, as this will prevent printing. Printed pages will be added to the "OTHERS" count. (See the "Key operator's guide".)

4

WEB FUNCTIONS OF THE MACHINE

The network expansion kit includes a built-in Web server. The Web server is accessed using a Web browser on your computer. The Web pages include both pages for users and pages for the administrator. In the user Web pages, users can monitor the machine, directly print a file specified on a computer, and select printer configuration settings. In the administrator Web pages, the administrator can configure the machine's e-mail settings, settings for print by e-mail, and passwords. Only the administrator is allowed to configure these settings.

HOW TO ACCESS THE WEB PAGE AND VIEW HELP

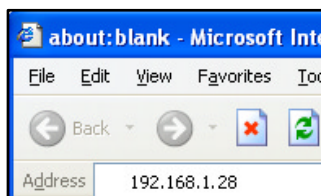
Use the following procedure to access the Web pages. [Help] can be clicked at the bottom of the menu frame to view information on the various function settings that can be configured remotely over the network from the machine's Web pages. For the settings of each function, see the explanations in Help.

1 Open the Web browser on your computer.

Supported browsers:

- Internet Explorer 5.5 or later (Windows)
5.1 or later (Macintosh)
- Netscape Navigator 6.0 or later

2 In the "Address" field of your Web browser, enter the IP address that has been configured in the machine.

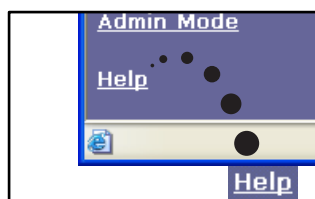


If you do not know the IP address, see ["CHECKING THE IP ADDRESS" \(page 37\)](#).

When the connection is completed, the Web page will appear in your Web browser.

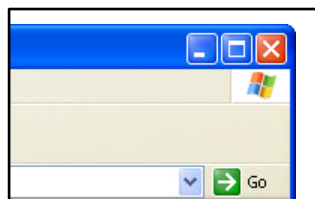
➤ [ABOUT THE WEB PAGES \(FOR USERS\) \(page 21\)](#)


3 Click the [Help] button at the bottom of the menu frame.



To view information on a function setting, click the corresponding item in the Help screen.

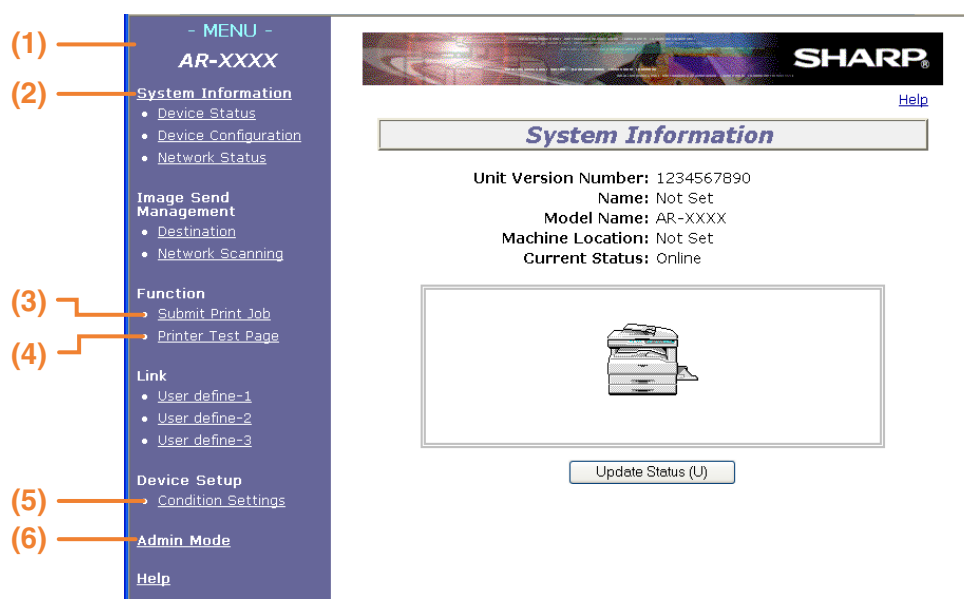
4 When finished, close the Web pages.



When you have finished using the Web pages, click the  (close) button in the top right corner of the page.

ABOUT THE WEB PAGES (FOR USERS)

When you access the user Web pages in the machine, the following page will appear in your browser. A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item.



(1) Menu frame

Click a setting in the menu to configure it.

(2) System Information

Shows the current status of the machine and model name.

- **Device Status**
Shows the current status of the machine, paper trays, output trays, toner and other supplies, and page counts.
Out of paper and other warnings appear in red.
- **Device Configuration**
Shows what options are installed.
- **Network Status**
Shows the network status. Information on "General", "TCP/IP", "NetWare", "AppleTalk", and "NetBEUI" is shown on the respective pages.

(3) Submit Print Job

A file on a computer can be printed out.

➤ [DIRECTLY PRINTING A FILE ON A COMPUTER \(page 22\)](#)

(4) Printer Test Page

The "Printer Settings List", which shows printer condition settings and key operator settings, and various font lists can be printed.

(5) Condition Settings

Configure basic printer settings and printer language settings.

➤ [PRINTER DEFAULT SETTINGS \(page 23\)](#)

(6) Admin Mode

To open the Web pages for the administrator, click here and then enter the administrator's user name and password.

➤ [ABOUT THE WEB PAGES \(FOR THE ADMINISTRATOR\) \(page 25\)](#)

➤ [PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE \(\[PASSWORDS\]\) \(page 26\)](#)

DIRECTLY PRINTING A FILE ON A COMPUTER

A file that can be accessed by your computer can be directly printed without using the printer driver by specifying the file's address.

Any file that can be accessed by your computer can be printed by this method, including not only files on your computer but also files on other computers connected to the same network.

To directly print a file by this method, click [Submit Print Job] in the menu frame of the Web page.

1 Click [Submit Print Job] in the menu frame.



The "Submit Print Job" screen will appear.

3 Click [Browse] and select the file that you wish to print.

You can also directly enter the file name (with the path).

4 Click [Print].

Printing begins.

2 Select the print format in "Job Detail".

The settings are described in the table below.

 A screenshot of the 'Submit Print Job' screen. The title is 'Function' with a 'Help' link. Below the title is a section 'Submit Print Job' with a 'Current Status' of 'Online' and an 'Update Status (U)' button. Below that is a 'Job Detail' section with the following settings: 'Copies' set to 1, 'Paper Size' set to 'Not Specified', 'Orientation' set to 'Portrait', 'Binding Edge' set to 'Left', 'Duplex' set to 'Off', and 'Account Number' set to an empty field. Below the settings is a note: 'Files with embedded printer settings will take precedence over web page settings.' and another note: 'The machine can print following file types: PDF(V1.3)(*) with file extensions pdf, TIFF with file extensions tif. Note: (*) Available only if the PS3 expansion kit is installed. Copy protected PDF files cannot be printed.' At the bottom is an 'Enter Filename' section with a text input field and a 'Browse...' button, and a 'Print (P)' button.


- PDF and TIFF files can be printed.
- To print PDF files, the optional PS3 expansion kit must be installed. Encrypted PDF files cannot be printed.

Advanced job settings

Item	Description	Factory default setting
Copies	Set the number of copies from 1 to 999.	1
Paper Size	Select the size of paper to be used for printing.	Not Specified
Orientation	Select the printing orientation. (Portrait / Landscape)	Portrait
Binding Edge	Select the binding position for two-sided printing. (Left / Top)	Left
Duplex	To print on both sides of the paper, select this checkbox. (Only for models that support the two-sided printing.)	Not selected
Account Number	When "AUDITING MODE" is enabled in the key operator programs, enter your 5-digit account number.	—

PRINTER DEFAULT SETTINGS

Configure basic printer settings and printer language settings. The printer default settings consist of the following three screens.

- [Default settings \(page 24\)](#): Basic settings that are mainly used when the printer driver is not used (for example, when printing from a DOS application).
- [PCL settings \(page 24\)](#): PCL symbol set, font, line feed code, and other settings.
- [PostScript settings \(page 24\)](#)*: Sets whether or not a PostScript error page is printed when a PostScript error occurs.

* This setting only appears when the PS3 expansion kit is installed.



When the printer driver is used and the same settings are configured both in the printer driver and in the above screens, the settings configured in the printer driver override the settings in the above screens. If a setting is available in the printer driver, use the printer driver to configure the setting.

Configuring the printer condition settings

1 Click [Condition Settings] in the menu frame.



The "Default Settings" screen of the [Condition Settings] appears. If you wish to select a setting in the "Default Settings" screen, go to step 3.

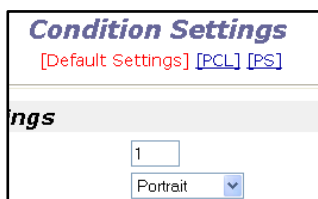
3 Make a selection for the setting in the screen that appears.

For detailed descriptions of the condition settings, see ["Printer condition settings" \(page 24\)](#).

4 Click [Submit] to save the entered information.

4

2 Click the desired setting.



Printer condition settings

Factory default settings are indicated in bold.

Default settings

Item	Settings	Description
Copies	1-999	This is used to select the number of copies.
Orientation	Portrait , Landscape	This sets the orientation of the printed page. Select [Portrait] when the image is longer in the vertical direction, or [Landscape] when the image is longer in the horizontal direction.
Default Paper Size	A3, B4, A4, A4R, B5, B5R, A5, Ledger, Legal, Foolscap, Letter* , Letter-R, Invoice	This sets the default paper size used for printing. Even if the set size of paper is not in any of the trays, the printed image is formed in accordance with this setting. *Factory default setting is A4 in some regions.
Default Paper Source	Auto , Tray 1, Tray 2*, Tray 3*, Tray 4*, Bypass (Manual), Bypass (Auto)	Set the default paper tray. *Selections available depend on the trays that are installed.
Disable Blank Page Print	Enable, Disable	When this is set to "Enable", blank pages are not printed.
2-Sided Print	1-Sided , 2-Sided (Book), 2-Sided (Tablet)	When [2-Sided (Book)] is selected, two-sided printing takes place so as to allow binding at the left side. When [2-Sided (Tablet)] is selected, two-sided printing takes place so as to allow binding at the top. (Only for models that support two-sided printing.)
ROPM*	Enable, Disable	This enables the ROPM function. When enabled, multi-page print jobs are stored in memory before printing, and thus the computer does not need to repeatedly send the print data when multiple copies are printed. * This setting is only effective when the dual function board is installed.

PCL settings

Item	Settings	Description
Symbol Set	Select one of 35 sets.	This specifies which country's characters (PCL symbol set) are assigned to certain of the symbols in the character code list. The factory default setting is [PC-8].
Font	Select one internal or one expansion font.	This specifies which PCL font to use for printing. One font can be specified from among the internal fonts and expansion fonts (when the barcode font kit or the Flash ROM kit is installed). The factory default setting is [0:Courier].
Line Feed Code	CR=CR; LF=LF; FF=FF , CR=CR+LF; LF=LF; FF=FF, CR=CR; LF=CR+LF; FF=CR+FF, CR=CR+LF; LF=CR+LF; FF=CR+FF	This specifies the line break code by means of a combination of the "CR" (return) code, "LF" (line break) code, and "FF" (page break) code. The factory default setting is printing based on the transmitted code. The setting can be changed by selecting one of four combinations.
Wide A4	Enable, Disable	This setting can be enabled to print 80 lines on A4 size paper with each line 10CPI font (English characters). When the setting is disabled (a checkmark does not appear), each line is 78 characters long.

PostScript settings

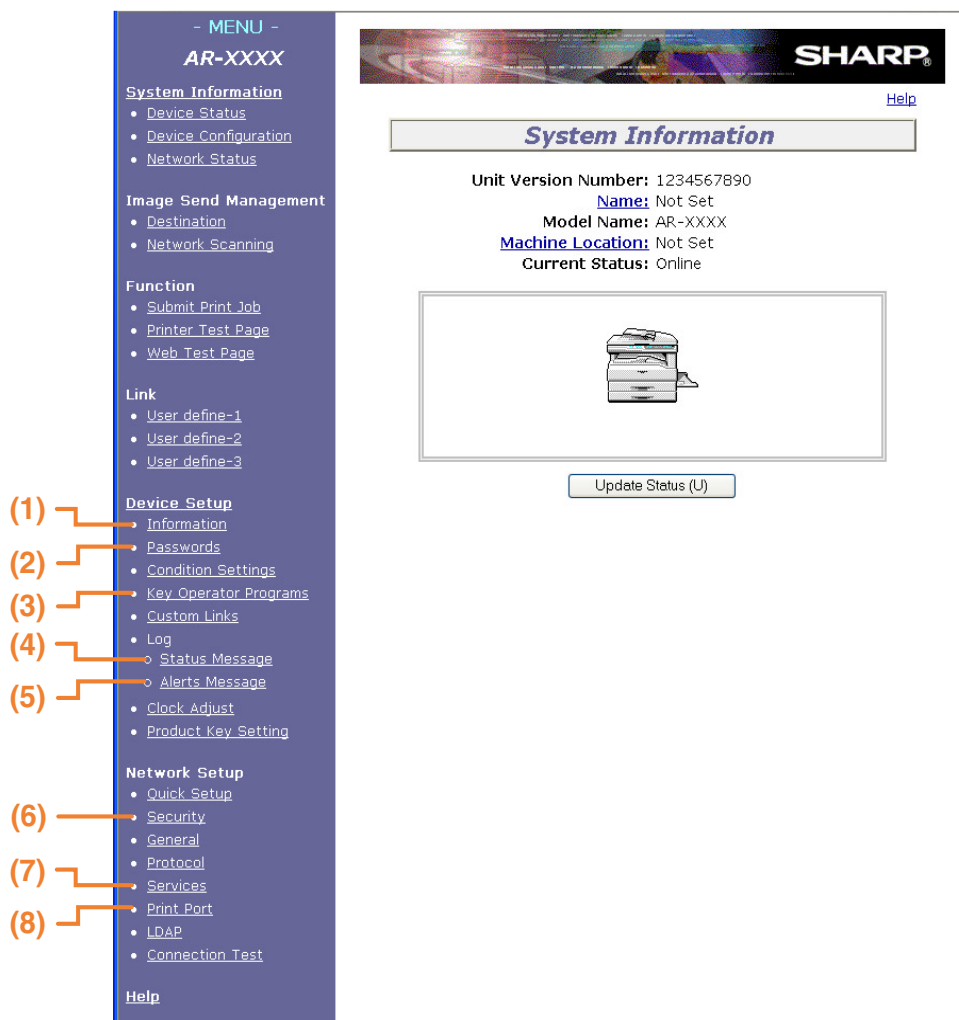
"PostScript Settings" only appears when the PS3 expansion kit is installed.

Item	Settings	Description
Print PS Errors	Enable, Disable	When this setting is enabled, an error description is printed each time a PostScript error occurs.

ABOUT THE WEB PAGES (FOR THE ADMINISTRATOR)

In addition to the menus that appear for users, other menus that can only be used by the administrator appear in the administrator Web pages.

A menu frame appears on the left side of the page. When you click an item in the menu, a screen appears in the right frame that allows you to configure settings for that item. Settings that can only be configured by the administrator are explained here.



(1) Information

Configure machine identification information for the status & alert E-mail function.

☛ [Information setup \(page 29\)](#)

(2) Passwords

To protect the Web site, the system administrator can establish passwords. Enter a password that you would like to establish and click the [Submit] button. One password can be established for the administrator and one password can be established for users.

☛ [PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE \(\[PASSWORDS\]\) \(page 26\)](#)

(3) Key Operator Programs

Setting changes can be prohibited and interface settings can be configured.

☛ [KEY OPERATOR PROGRAMS \(page 28\)](#)

(4) Status Message

Configure parameters required for sending status messages, such as destination addresses and time schedules.

☛ [Status message setup \(page 30\)](#)

(5) Alerts Message

Store destination addresses for alert messages.

☛ [Alerts message setup \(page 30\)](#)

(6) Security

Unused ports can be disabled for greater security and port numbers can be changed.



If "HTTP" is disabled, it will not be possible to open the Web pages. To open the Web pages, reset the network expansion kit.

☛ ["How to reset the network expansion kit" \(page 37\)](#)

(7) Services

Configure information concerning the e-mail system.

☛ [SMTP setup \(page 29\)](#)

(8) Print Port

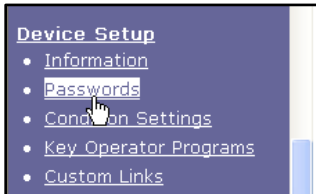
Configure settings for e-mail print.

☛ [Setting up the E-mail print function \(page 27\)](#)

PROTECTING INFORMATION PROGRAMMED IN THE WEB PAGE ([PASSWORDS])

Passwords can be set (click [Passwords] in the menu frame) to restrict Web page access and protect settings. The administrator must change the password from the factory default setting. The administrator must also take care to remember the new password. The next time the Web pages are accessed, the new password must be entered. A password can be set for the administrator and a password can be set for users.

1 Click [Passwords] in the menu frame.



2 Enter the current password in "Admin Password".

When establishing a password for the first time, enter "Sharp" in "Admin Password".



Be sure to enter "S" in upper case and "harp" in lower case (passwords are case sensitive).

3 Enter passwords in "User Password" and "Admin Password".

- A maximum of 7 characters and/or numbers can be entered for each password (passwords are case sensitive).
- Be sure to enter the same password in "Confirm Password" as you did in "New Password".

4 When you have finished entering all items, click [Submit].

The entered password is stored.

After setting the password, turn the machine power off and then back on.

When prompted to enter a password, a user should enter "user" and an administrator should enter "admin" in "User Name". In "Password", the respective password for the entered user name should be entered.

For more information, click [Help] in the upper right-hand corner of the window.

E-MAIL PRINT FUNCTION

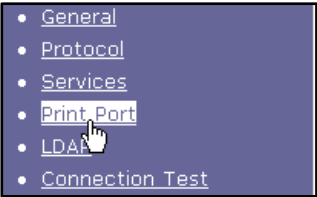
An e-mail account can be set up for the machine. When this is done, the machine will periodically check the e-mail server for e-mail and automatically print out any file attachments it receives. This provides a means for printing a file from a computer that does not have the printer driver installed, as the user can simply send the file to the machine as an e-mail attachment.

Setting up the E-mail print function

To use the e-mail print function, the machine must have an e-mail account.

1

Click [Print port] in the menu frame.



The "Print Port Setup" page appears.

3

Enter the information regarding the e-mail environment.

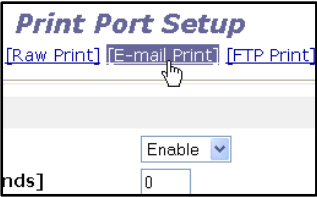
For detailed information, Click [Help] in the upper right-hand corner of the window.

4

Click [Submit] to store the entered information.

2

Click [E-mail print].



4

Using the E-mail print function

To use the e-mail print function, attach the file that you wish to print to an e-mail message and send the e-mail to the machine's e-mail address.

The machine can print the following file types: PCLXL, PCL5e, PS, PDF, and TIFF, with file extensions pcl, ps, pdf, tiff, and tif.

Control commands can be entered in the message of the e-mail to specify the number of copies and print format. Commands are entered in the format "command name = value".

The following control commands can be entered:

Function	Command name	Values	Example
Copies	COPIES	1-999	COPIES=2 DUPLEX=LEFT ACCOUNTNUMBER=11111 PAPER=LETTER
Two-sided print	DUPLEX	OFF, TOP, LEFT	
Account number	ACCOUNTNUMBER	5-digit number	
File type	LANGUAGE	AUTO, PCL, PCLXL, POSTSCRIPT, PDF, TIFF	
Paper	PAPER	Name of available paper (LETTER, A4, etc.)	



- Enter the commands in Plain Text format. If entered in Rich Text format (HTML), the commands will have no effect.
- To receive a list of the control commands, enter the command "Config" in the e-mail message.
- If an e-mail is sent with nothing entered in the message, printing will take place according to the settings in the condition settings menu in the Web page ["Default settings" \(page 24\)](#).
- To print PS and PDF files, the PS3 expansion kit is required.
- An encrypted PDF file cannot be printed.
- Only enter a "File type" when you are specifying a page-description language. Normally there is no need to enter a file type.

KEY OPERATOR PROGRAMS

The key operator programs are used to prohibit changes to the [Condition Settings] and to configure interface settings.

- [Default settings](#): Select the setting for which you wish to prohibit changes.
- [Interface settings](#): Enable monitoring of data sent to the network port and set restrictions.

Configuring a setting in the key operator programs

1 Click [Key operator programs] in the menu frame.



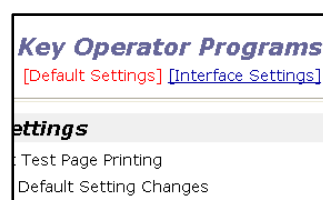
The "Default Settings" screen of the [Key operator programs] will appear. If you wish to select a setting in the "Default Settings" screen, go to step 3.

3 Make a selection for the setting in the screen that appears.

See "[Key operator programs](#)" for descriptions of the settings.

4 Click [Submit] to store the entered information.

2 Click the desired setting.



Key operator programs

When "YES, NO" appears in the "Settings" column, "YES" is selected when a checkmark appears in the checkbox of the item, and "NO" is selected when checkmark does not appear.

Default settings

Item	Settings	Description
Prohibit Test Page Printing	YES, NO	This setting is used to prohibit printing of a printer test page.
Disable Default Setting Changes	YES, NO	This setting is used to prohibit changes to the default condition settings.
Disabling of Clock Adjustment	YES, NO	This setting is used to prohibit changes to the date and time settings. This item does not appear when the fax option is installed.

Interface settings

Item	Settings	Description
Hexadecimal Dump Mode	YES, NO	This program is used to print out the print data from the computer in hexadecimal and in the corresponding text characters (based on ASCII code). This allows you to check whether or not print data is being correctly sent from the computer.
I/O Timeout	1- 60 - 999 (sec)	During reception of a print job, if remaining data is not received after the time set here elapses, the port connection is broken and the next print job is begun.
Emulation Switching	Auto*, PostScript*, PCL	Select the printer language. When [Auto] is selected, the language is automatically selected from the data sent to the printer. Unless errors occur frequently, do not change the setting from [Auto] to another setting. *Only when the PS3 expansion kit is installed.
Port Switching Method	Switch at End of Job, Switch after I/O Timeout	Select the method for switching network ports.

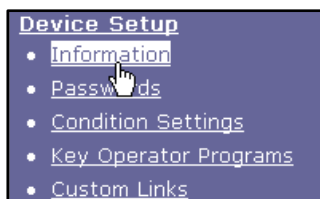
E-MAIL STATUS AND E-MAIL ALERT SETTINGS

These functions send information on machine use (print count, copy count, etc.) and error conditions (paper misfeed, out of paper, out of toner, etc.) via e-mail to the administrator of the machine or the dealer.

Information setup

Machine identification information for the status and alert e-mail functions is configured in the "Information Setup" screen. The entered information will be included in status and alert e-mail messages.

1 Click [Information] in the menu frame.



The "Information Setup" screen will appear.

2 Enter the machine information.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

3 Click [Submit] to store the entered information.

SMTP setup

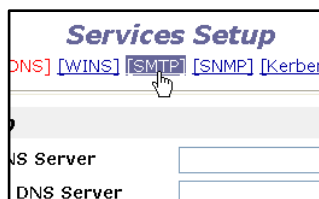
The status and alert e-mail functions use SMTP (Simple Mail Transport Protocol) to send e-mail. The following procedure is used to set up the e-mail environment. This must be done by the system administrator or other person familiar with the network.

1 Click [Services] in the menu frame.



The "Services Setup" screen will appear.

2 Click [SMTP].



3 Enter the information required to set up the e-mail environment.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

4 Click [Submit] to store the entered information.

4

Status message setup

Use the status message function to send the current counter information, including the copy count, print count, and total output count, based on the specified schedule. The destinations can be set for administrators and dealers respectively.

To set up the status message, follow these steps.

1 Click [Status Message] in the menu frame.



The "Status Message Setup" screen will appear.

2 Enter the required information, including the destination addresses and time schedule.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

A screenshot of the 'Status Message Setup' web page. It has a title bar with 'Status Message Setup' and tabs for '[Standard]' and '[Advanced]'. Below is a section 'E-mail Status Message List 1' with an 'E-mail Address' input field, two checkboxes for 'Send by Schedule 1' and 'Send by Schedule 2', and a 'Send Now (1)' button.

3 Click [Submit] to store the entered information.

When the E-mail Status settings are completed, printer count information will be sent periodically by e-mail to the specified e-mail addresses.



If you quit the browser before clicking [Submit], the settings will be canceled. To send printer information immediately to the specified e-mail addresses, click [Send Now].

Alerts message setup

Use the alert message function to send alert information, such as empty toner and paper and trouble including paper misfeeds, to specified destinations when such problems occur. The destinations can be set for administrators and dealers respectively.

To set up the alert message, follow the procedure below.

1 Click [Alerts Message] in the menu frame.



The "Alerts Message Setup" screen will appear.

2 Enter the destination addresses.

For detailed information, click the [Help] button in the upper right-hand corner of the window.

A screenshot of the 'Alerts Message Setup' web page. It has a title bar with 'Alerts Message Setup'. Below are two sections: 'E-mail Alert Message List 1' and 'E-mail Alert Message List 2', each with an 'E-mail Address' input field.

3 Click [Submit] to store the entered information.

If these parameters are set, event information for the printer will be transmitted to the specified addresses via E-mail each time a specified event occurs. The meaning of each event item is shown below.

(Example)

Paper Jam: A paper misfeed has occurred.
Toner Low: Toner is low.
Toner Empty: Toner must be added.
Paper Empty: Paper must be loaded.



If you quit the browser before clicking [Submit], the settings will be canceled.

5

KEY OPERATOR PROGRAMS

The key operator programs allow the administrator of the machine (key operator) to enable and disable functions to suit the needs of the workplace. This chapter explains the key operator programs for the network and printer functions. For key operator programs for general use of the machine, see the "Key operator's guide".


For the initial key operator code set at the factory, see "PROGRAMMING A KEY OPERATOR CODE" in the "Key operator's guide".

KEY OPERATOR PROGRAM LIST

The key operator programs for the network and printer functions are shown in the following table. Factory default settings are indicated in bold. When "YES, NO" appears in the "Settings" column of a program, the program is enabled by pressing the [OK] key so that a checkmark appears in the checkbox. A checkmark in the checkbox (☒) indicates that "YES" is selected. No checkmark (☐) indicates that "NO" is selected.



The key operator programs that can be accessed depend on the machine and the options that are installed.

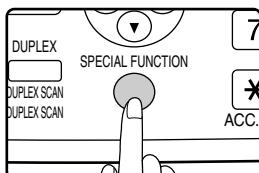
Mode	Program	Settings	Explanation
NETWORK	ENABLE DHCP	YES, NO	Enable this setting if the machine will use an IP address that is assigned by a DHCP server. If DHCP is used, the IP address assigned to the machine may change automatically on occasion. If this happens, printing will not be possible. Change the port setting of the printer driver to the new IP address.
	IP ADDRESS SETTINGS • IP ADDRESS • SUBNETMASK • DEFAULT GATEWAY	—	If the machine will be assigned a permanent IP address, use these settings to enter the IP address, subnet mask, and default gateway.  SPECIAL SETTINGS (page 33)
	ENABLE TCP/IP	YES, NO	Select whether or not TCP/IP protocol will be used.
	ENABLE NetWare	YES, NO	Select whether or not NetWare protocol will be used.
	ENABLE EtherTalk	YES, NO	Select whether or not EtherTalk protocol will be used.
	ENABLE NetBEUI	YES, NO	Select whether or not NetBEUI protocol will be used.
PRINTER	NOTICE PAGE	YES, NO	Select whether or not a Notice Page (page 36) is printed when printing is not successful due to a memory full (or other) error.
	FORCED OUTPUT OF PRINT	YES, NO	When no tray has the specified size of paper, this setting is used to select whether or not the print job will be printed on the closest size of paper.
	OUTPUT TRAYS	CENTER TRAY, UPPER TRAY	Specifies the output tray. When the printer driver is used to print, the setting in the printer driver has priority. (This setting is only available if a job separator tray is installed.)

USING THE KEY OPERATOR PROGRAMS

BASIC PROCEDURE FOR CONFIGURING SETTINGS

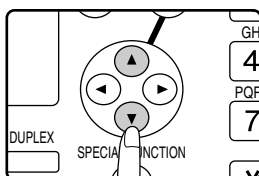
Follow the steps below to access the key operator settings for the network and printer functions.

1 Press the [SPECIAL FUNCTION] key.



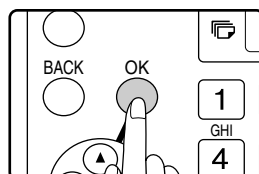
The special function screen will appear.

2 Select "KEY OPERATOR PRG." with the [▼] or [▲] key.



SPECIAL FUNCTION
▲ PAPER SIZE SET
DISPLAY CONTRAST
TOTAL COUNT
▼ KEY OPERATOR PRG.

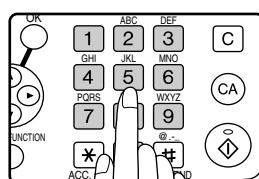
3 Press the [OK] key.



The key operator code entry screen will appear.

Enter key operator code.
KEY OPERATOR CODE:

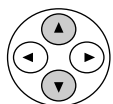
4 Use the numeric keys to enter the key operator code.



MODE SELECT
▲ KEY OP. # CHANGE
COPIER
PRINTER
▼ SCANNER

- " * " will appear for each digit entered.
- The mode selection screen will appear.

5 Select the desired mode with the [▼] or [▲] key.



MODE SELECT
▲ KEY OP. # CHANGE
COPIER
PRINTER
▼ SCANNER

6 Press the [OK] key.

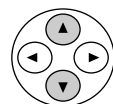


PRINTER
▲ ☒ NOTICE PAGE
☐ FORCED OUTPUT OF
PRINT
▼ ☐ OUTPUT TRAYS

The settings of the selected mode will appear.

Example: The above screen shows the settings when printer mode is selected.

7 Select the desired program with the [▼] or [▲] key.



- A checkbox appears to the left of several of the programs. To enable a function (make a checkmark appear), press the [OK] key. To cancel a selection, press the [OK] key once again to remove the checkmark and disable the function. Go to step 9.
- When the [OK] key is pressed for a program that does not have a checkbox, the settings for the program appear.

8 Press the [OK] key and follow the instructions in the program screen.



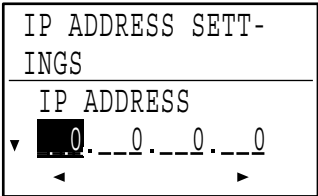
9 To use another program for the same mode, select the desired program with the [▼] or [▲] key.

To use a program for a different mode, press the [BACK] key and select the desired mode. To exit the key operator programs, press the [CA] key (CA).

SPECIAL SETTINGS

IP address settings

This program is used to set the "IP ADDRESS", "SUBNETMASK", and "DEFAULT GATEWAY". The following screen appears when this program is selected.



1 Enter the IP address, subnet mask, and default gateway.

[▼][▲] keys	These move the cursor up and down to select "IP ADDRESS", "SUBNETMASK", and "DEFAULT GATEWAY".
[◀][▶] keys	These move the cursor left and right.
Numeric keys	These are used to enter numbers.
[C] key (⏏)	Use this to cancel an entry.
[BACK] key	This cancels an entry and returns you to the previous screen.
[CA] key (⏏)	This cancels the setting and returns the display to the base screen of the mode that was in effect before the key operator programs were entered.
[SPECIAL FUNCTION] key	This cancels the setting and returns the display to the base screen of the mode that was in effect before the key operator programs were entered.

2 When you have completed all settings, press the [OK] key.

The settings will be saved.

3 Turn off the machine power, wait for a few seconds, and then turn on the power again.

The new settings will take effect after the power is turned on.

TROUBLESHOOTING

This chapter explains what to do when the machine does not connect to the network or when problems occur during printing.

For problems related to the machine such as running out of paper or paper misfeeds, see the "Operation manual (for general information and copier)".

Network connection problems

Problem	Cause and solution	Page
The machine does not connect to the network.	The LAN cable is disconnected. → Make sure that the LAN cable is firmly inserted in the connectors on the machine and your computer. To connect the cable, see the "Software setup guide".	Software setup guide
	Is the machine configured for use on the same network as the computer? → The machine cannot be used if it is not connected to the same network as the computer, or if it is not configured for use on the network. For more information, consult your network administrator.	—
	(Points to check on the Macintosh) AppleTalk is disabled. → In Mac OS X, click [Network] in [System Preferences] and select Ethernet in "Show". Click the [AppleTalk] tab and make sure that [Make AppleTalk Active] is selected. In Mac OS 8.6 to 9.2.2, open [Chooser] from the Apple menu and make sure that [Active] is selected. Printing is not possible if [Active] is not selected. [Ethernet] is not selected for "Connect via" for AppleTalk? (Mac OS 8.6 to 9.2.2) → Open [AppleTalk] from the [Control Panels] and make sure that [Ethernet] is selected in the "Connect via" menu. Printing is not possible if [Ethernet] is not selected.	—

Problems during printing

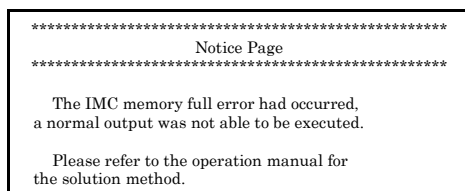
Problem	Cause and solution	Page
The machine does not receive print data. (The DATA indicator does not blink.)	The machine is set to off-line mode. → Press the [PRINT] key to select printer mode and then select "ONLINE" with the [▲] key.	3, 17
	Your machine is not selected correctly in the application for the print job. → In the dialog box that appears after you select [Print] from the [File] menu in the application, make sure you have selected the machine as the printer.	3, 17
	Copying or scanning is in progress, or a fax is being printed (when the fax option is installed). → Wait until copying, scanning, or fax printing is finished.	—
	Has the printer driver been installed correctly? → Install the appropriate printer driver. For the procedure for installing the printer driver, see the "Software setup guide", which accompanies the machine.	Software setup guide
	The port setting is not correct. → Printing is not possible if the printer driver port setting is not correct. Set the port correctly.	Software setup guide
	"CANCEL JOBS OF INVALID ACCOUNTS" is enabled. → Enter a correct account number in the printer driver before printing (consult your key operator).	5, 19
	The printed page limit has been reached. → Consult your key operator. (Depending on the machine status, the DATA indicator may blink.)	Key operator's guide
Printing does not take place. (The DATA indicator is blinking.)	There is no paper in the specified tray. → Load paper in the tray.	Operation manual (for general information and copier)
	"FORCED OUTPUT OF PRINT" is disabled. → Add paper to the bypass tray, press the [PRINT] key on the machine to switch to printer mode, and then select "BYPASS-TRAY". Printing will resume.	4, 19
Printing is slow.	Simultaneous use of two or more application software programs. → Start printing after quitting all unused application software programs.	—
The printed image is light and uneven.	The paper is loaded so that printing takes place on the back side of the paper. → Some types of paper have a front and a back side. If the paper is loaded so that printing takes place on the back side, toner will not adhere well to the paper and a good image will not be obtained.	Operation manual (for general information and copier)
The printed image is dirty.	You are using paper that is outside the specified size and weight range. → Use paper within the specified range.	Operation manual (for general information and copier)
	The paper is curled or damp. → Replace the paper. During periods when the machine is not used for a long time, remove the paper from the tray and store it in a dark place in a bag to prevent moisture absorption.	Operation manual (for general information and copier)
	You did not set sufficient margins in the paper settings of your application. → The top and bottom of the paper may be dirty if the margins are set outside of the specified print quality area. → Set the margins within the specified print quality area.	—

Problem	Cause and solution	Page
The printed image is skewed or it runs off the paper.	The paper size set in the printer driver is not the same as the paper size loaded in the tray. → Make sure that the paper size setting matches the size of the paper loaded in the tray. If the [Fit to Page] setting is selected in Windows, make sure that the paper size selected in the "Fit To Paper Size" drop-down list is the same as the size of the paper loaded in the tray.	—
	The image orientation setting in the printer driver is not correct. → On a Windows environment, click the [Paper] tab in the printer driver setup screen and make sure that "Image Orientation" is set to the correct orientation. On a Macintosh, make sure that the correct orientation is selected in the application settings.	—
	Paper is not loaded properly. → Make sure the paper is correctly loaded.	Operation manual (for general information and copier)
	The margins are not set correctly in the application. → Check the paper size and margin settings in the application. Also make sure that the print settings are correct for the paper size.	—

A notice page is printed

If you find that a notice page has been printed at the end of a print job, the print data received from the computer has not been printed as specified. Fix the problem as explained below and then try printing again.

What to do when a notice page is printed



The above notice page is printed when a print job containing more data than can be held in the memory of the dual function board memory is sent. If you printed using the printer driver, remove the checkmark from [ROPM] in the [Configuration] tab of the printer driver setup screen to disable the ROPM function. If you need to use the ROPM function, select a lower resolution setting in the printer driver or increase the amount of memory.



- The Notice Page can be set to not print out in ["NOTICE PAGE" \(page 31\)](#) of the key operator programs.

When the dual function board is installed

- The dual function board memory is used to temporarily hold print data when the ROPM function is used. This memory is also used to temporarily store original image data during a copy job. The proportion of memory allocated to the printer function can be changed in the key operator programs. (See the "Key operator's guide".) The memory can be increased by adding the optional memory modules. For details, contact your SHARP dealer.

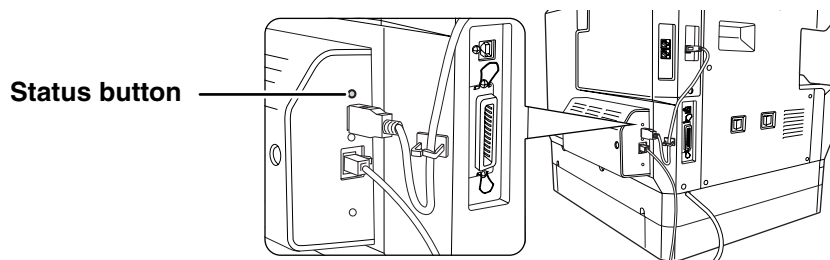
When the dual function board is not installed

- A notice page such as "The incorrect driver is chosen, a normal output was not able to be executed....." will be printed if you attempt to print using the print driver for the dual function board. Install the standard print driver as explained in "1. INSTALLING THE SOFTWARE (THAT ACCOMPANIES THE MACHINE)" in the "Software setup guide" and select the standard driver when printing.

CHECKING THE IP ADDRESS

There are several settings where the IP address must be entered or checked.

To check the IP address of the machine, hold down the status button on the network expansion kit for at least 2 seconds to print out a Printer Setting List.



How to reset the network expansion kit

To reset the network expansion kit, power on the machine while holding down the status button on the network expansion kit.

Network scanner destination information and scanning settings will remain after the network expansion kit is reset, however, the network settings and network printer settings will revert to the factory default settings.

7

SPECIFICATIONS

PRINTER SPECIFICATIONS

Printing speed*1	When the dual function board is installed: AR-M206/AR-M207: 20 pages/min, AR-M161/AR-M162/AR-M165: 16 pages/min When the dual function board is not installed: 12 pages/min
Resolution	600 dpi / 300 dpi*2
Network expansion kit memory*3	Standard memory: 64 MB Additional memory slot: 1 slot (an additional 128 MB or 256 MB memory module (144-pin SDRAM SODIMM) can be installed)
Emulation	PCL5e, PCL6, PS3 (PostScript 3)*4
Installed fonts	PCL6/PCL5e compatible: 80 outline fonts and 1 bitmap font PostScript 3 compatible*3: 136 outline fonts
Interface	10/100Base-TX network interface

*1 Print speed during printing of the second sheet and following sheets when using 8-1/2" x 11" (A4) plain paper and performing continuous one-sided printing of the same page; excluding use of offset output.

*2 300 dpi can only be selected when using the PCL6 or PCL5e printer driver.

*3 For information on machine and dual function board memory, see the "Operation manual (for general information and copier)".

*4 Available only if the PS3 expansion kit (AR-PK1/N) is installed.



As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice.

PRINTER DRIVER SPECIFICATIONS

Function		PCL6	PCL5e	PS	Windows PPD	Macintosh PPD
Frequently used functions	Number of copies	1 to 999	1 to 999	1 to 999	1 to 999	1 to 999
	Printing orientation	Yes	Yes	Yes	Yes	Yes
	N-up	Number	2, 4, 6, 8, 9, 16	2, 4, 6, 8, 9, 16	2, 4* ¹	2, 4, 6, 9, 16
		Order	Selectable	Selectable	Fixed	Selectable
		Border	Yes/No	Yes/No	Yes/No* ¹	Selectable
	Two-sided printing* ²	Yes	Yes	Yes	Yes	Yes
	Binding Style* ²	Book/Tablet	Book/Tablet	Book/Tablet	Long Side / Short Side	Long Side / Short Side
	Pamphlet Style* ²	Yes	Yes	Yes	No* ³	No
Source Selection	Paper size	Yes	Yes	Yes	Yes	Yes
	Custom Paper Size	1 size	1 size	1 size	3 sizes* ⁴	1 size* ⁵
	Source Selection	Yes	Yes	Yes	Yes	Yes
	Output tray settings	Yes	Yes	Yes	Yes	Yes
	Cover Settings	Yes	Yes	Yes	No	Yes
Graphics	Resolution	600/300dpi	600/300dpi	600dpi	600dpi	600dpi
	Halftone	No	No	Yes	No	No
	Graphics Mode	Yes	Yes	No	No	No
	Zoom	No	No	Yes	Yes	Yes
	Mirror Image	No	No	Yes	Yes	Yes
	Negative Image	No	No	Yes	Yes	Yes
	Fit To Page	Yes	Yes	Yes	No	No
Fonts	Resident fonts	80 fonts	80 fonts	136 fonts	136 fonts* ⁶	35 fonts
	Selectable download fonts	bitmap, TrueType, Graphics	bitmap, TrueType, Graphics	bitmap, Type1, TrueType	bitmap, Type1, TrueType	No* ⁷
Other functions	Automatic configuration settings	Yes	Yes	Yes	No	Yes* ⁸
	ROP M* ⁹	Yes	Yes	Yes	Yes	Yes
	Overlay	Yes	Yes	Yes	No	No
	Job Control	Yes	Yes	Yes	No	Yes* ⁵
	Watermark	Yes	Yes	Yes	Yes	Yes
	Job Compression	No	No	Yes	No	No
	Bitmap Compression	No	No	Yes	No	No

*1 N-up printing cannot be used in Windows NT 4.0. In Windows 2000/XP/Server 2003, 2, 4, 6, 9, and 16 N-up printing can be used.

*2 Only for models that support two-sided printing.

*3 Pamphlet style printing is available in Windows 2000/XP/Server 2003.

*4 A custom paper size cannot be set in Windows NT 4.0. In Windows 2000/XP/Server 2003, one custom paper size can be set.

*5 Cannot be used in Mac OS X v10.1.5.

*6 In Windows NT 4.0, 35 resident fonts are available.

*7 Type 1 and TrueType can be selected in some versions of LaserWriter.

*8 Cannot be used in Mac OS X.

*9 Can only be used when the dual function board is installed.

